LIST OF CONTENTS

NUMBER 1

B. J. Falkowski and **S. Rahardja**	1	Operations on logic functions and variables through sign Haar spectra
M. Stanković, B. J. Falkowski, D. Janković and **R. S. Stanković**	13	Calculation of the paired Haar transform through shared binary decision diagrams
R. S. Stanković and **B. J. Falkowski**	25	The Haar wavelet transform: its status and achievements
S. Özcan, O. Çiçekoğlu and **H. Kuntman**	45	Multi-input single-output filter with reduced number of passive elements employing single current conveyor
A. K. Saxena and **D. A. Rao**	55	A new approach to bus impedance matrix building
M. Veerachary, T. Senjyu and **K. Uezato**	67	Modeling of closed-loop voltage-mode controlled interleaved dual boost converter
Y. Yamazaki	85	Adaptive-intelligent control of intelligence flows as microheat transfer
Y.-M. Tseng, J.-K. Jan and **H.-Y. Chien**	101	Authenticated encryption schemes with message linkages for message flows
A. Karci and **A. Arslan**	111	Bidirectional evolutionary heuristic for the minimum vertex-cover problem
H. C. Wasserman and **S. A. Ghozati**	121	Generalized linear recursive networks: topological and routing properties
H. Cai, Z. Qu and **D. Gan**	135	A nonlinear robust HVDC control for a parallel AC/DC power system
S. A. Ghozati and **T. Smires**	151	The fastcube: a variation on hypercube topology with lower diameter
M. A. Masnadi-Shirazi and **M. Aleshams**	173	Laguerre discrete-time filter design
M. S. Mahmoud and **M. Zribi**	193	Guaranteed cost observer-based control of uncertain time-lag systems
M. A. El-Gamal and **M. Abdulghafour**	213	Fault isolation in analog circuits using a fuzzy inference system
		Technical Communications
E.-W. Bai and **K. E. Lonngren**	231	The spherical capacitor: a vehicle to introduce numerical methods

doi:10.1016/S0045-7906(03)00048-X

M. S. Fadali 235 Observer-based robust fault detection of multirate linear system using a lift reformulation

S.-H. Wang 245 An improved stepsize of the subgradient algorithm for solving the lagrangian relaxation problem

Ch. S. Atchiraju and **T. Nagraja** 251 A computer software for PID tuning by new frequency domain design method

259 List of Referees

NUMBER 2

X. Ye, J. Zhou and **X. Song** 263 On reachability graphs of Petri nets

M. J. Burridge and **Z. Qu** 273 An improved nonlinear control design for series DC motors

K. H. McNichols and **M. Sami Fadali** 289 Selecting operating points for discrete-time gain scheduling

M. Thornton 303 A signed binary addition circuit based on an alternative class of addition tables

R. K. Srivastava 317 Characteristic of double gap SLIM under constant current excitation

I. Ahmad 327 HARD: A hypercube embedding algorithm for state assignment of finite state machines

H. Lee and **G. E. Sobelman** 357 Performance evaluation and optimal design for FPGA-based digit-serial DSP functions

NUMBER 3

E. Akın, M. Kaya and **M. Karakose** 379 A robust integrator algorithm with genetic based fuzzy controller feedback for direct vector control

H.-C. Chao, C.-R. K. Lay and **J. L. Chen** 395 A distributed multicast tree using share link migration scheme for wireless asynchronous transfer mode network

S. Baskar, P. Subbaraj and **M. V. C. Rao** 407 Hybrid real coded genetic algorithm solution to economic dispatch problem

Z. Moravej, D. N. Vishwakarma and **S. P. Singh** 421 Application of radial basis function neural network for differential relaying of a power transformer

K. Olmos, S. Pierre and **Y. Boudreault** 435 Traffic simulation in urban cellular networks of Manhattan type

P. Karim Aghaee, A. Zilouchian, S. Nike-Ravesh and **A. H. Zadegan** 463 Principle of frequency-domain balanced structure in linear systems and model reduction

NUMBER 4

S. M. Radaideh and **M. Al-Rousan** 479 APαI controller for linear systems with nonconstant disturbances

M. Pandit, L. Srivastava and **J. Sharma** 489 Two-phase neural network based estimation of degree of insecurity of power system

T. Niewierowicz, R. Escarela-Perez and **E. Campero-Littlewood** 505 Hybrid genetic algorithm for the identification of high-order synchronous machine two-axis equivalent circuits

F. Naceri and **L. Abida** 523 A novel robust adaptive control algorithm for AC drives

H. M. Harmanani 535 A neural networks algorithm for data path synthesis

L. Behera 553 Query based model learning and stable tracking of a robot arm using radial basis function network

NUMBER 5

S. N. Singh and **K. David** 575 Congestion management in dynamic security constrained open power markets

L. Srivastava, S. N. Singh and **J. Sharma** 589 Parallel self-organising hierarchical neural network based estimation of degree of voltage insecurity

S. Herdem and **M. S. Mamiş** 603 Computation of corona effects in transmission lines using state-space techniques

M. Abdallah, S. Odeh and **S. Shaltaf** 613 Implementation of an online DCT based time-varying delay estimator using systolic arrays

R. L. Dollarhide and **A. Agah** 625 Simulation and control of distributed robot search teams

Technical Communication

G. Rodríguez, L. Aromataris, M. Donolo, J. Hernandez and **D. Moitre** 643 Software for calculation of electric power systems parameters

NUMBER 6

Y. A. Safar and **M. M. Saied** 653 A model for simulating corona in the electromagnetic transients on transmission lines

N.-E. Rikli	667	Design of a gateway for VBR voice traffic over N-ISDN and B-ISDN networks
H. Altun, K. M. Curtis and **T. Yalcınoz**	687	Neural learning for articulatory speech synthesis under different statistical characteristics of acoustic input patterns
S.-K. Oh, W. Pedrycz and **B.-J. Park**	703	Polynomial neural networks architecture: analysis and design

NUMBER 7

G. K. Singh, V. Pant and **Y. P. Singh**	727	Stability analysis of a multi-phase (six-phase) induction machine
P.-H. Huang	757	An application of quantitative techniques to conflict resolution in a multi-agent system
B. Shafai, B. H. Wilson and **J. Chen**	781	Robust stability of a special class of polynomial matrices with control applications

NUMBER 8

Y.-P. Lai and **C.-C. Chang**	801	Parallel computational algorithms for generalized Chinese remainder theorem
G. K. Singh, V. Pant and **Y. P. Singh**	813	Voltage source inverter driven multi-phase induction machine
N. Tan	835	Computation of stabilizing Lag/Lead controller parameters
S. A. Al-Jufout	851	Modeling of the cage induction motor for symmetrical and asymmetrical modes of operation
T. Fernando, H. Trinh and **S. Nahavandi**	861	Lower bounds for stability margin of n-dimensional discrete systems
	III	Volume and issue contents for Volume 29 (2003)
	VII	Keyword Index for Volume 29 (2003)
	IX	Author Index for Volume 29 (2003)